



TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER EL PASO

Operating Policy and Procedure

HSCEP OP: 75.26, Hazardous Materials Emergency Response Policy
OSHA Standard CFR 1910.120

PURPOSE: The purpose of this Texas Tech University Health Sciences Center El Paso (TTUHSC El Paso) Operating Policy and Procedure (HSCEP OP) is to minimize threats to human health and the environment from any unplanned release of hazardous materials. TTUHSC El Paso Safety Services Department designed the Hazardous Materials Emergency Response Plan to conform with the Federal Occupational Safety and Health Administration (OSHA) Hazardous Waste Operations and Emergency Response Plan under 29 CFR 1910.120. The purpose of this plan is to ensure rapid, appropriate, and safe response to chemical spills.

In order to comply with federal requirements, all departments and off-site clinics are encouraged to become familiar with the contents of this plan. Copies of the plan may be obtained from the Department of Safety Services; the plan may also be viewed on the department's web-page.

REVIEW: These procedures should be followed by all faculty, staff, students, volunteers, and contractual services employees who may become directly or indirectly involved in or aware of any hazardous materials incident or accident in work areas. It is important that the safety of individuals always be the foremost priority in responding to spills regardless of how insignificant or inoffensive the size of any specific chemical spill may seem. In the event of a chemical spill, the individual who is the most knowledgeable about the spill is responsible for prompt notification and, if safe to do so, proper clean-up. This includes receipt, packaging, transport, use, disposal, or emergency response and cleanup activities, under normal or emergency conditions.

This plan will be overseen primarily by the Department of Safety Services Managers. However, all personnel involved in the handling of hazardous materials should become familiar with this plan and comply with its contents.

This plan will be reviewed in March of every even numbered year by the senior director safety services, with recommendations and revisions forwarded through the managing director of physical plant and support services to the chief operating officer.

PROCEDURE:

I. Definitions

- A. Class I Release- An incidental hazardous material release in which minimal health risk or damage is present; departmental Clean-up.
- B. Class II Release- A hazardous material release that may present some danger to building occupants beyond the capabilities of departmental personnel. Release must be reported to facility safety and police.
- C. Class III Release- A hazardous material release which will require outside assistance. The need for assistance shall be determined by the TTUHSC El Paso safety manager. Class III releases require a report to TTUHSC El Paso Safety Services Office;

- D. Class IV Release- A hazardous material release which may include building damage, injured persons and may cause Emergency Operations Center (EOC) activation, or assistance from the local Fire Department HAZMAT Team. Class IV requires a report to TTUHSC El Paso Safety Services; HSCEP OP 75.27
- E. Chemical Spill- Any unplanned or uncontrolled release of any solid, semi-solid, liquid or gas hazardous chemical that can pose a potential safety or health risk to people or the environment.
- F. Health Hazard- chemicals that may cause various acute or chronic adverse health effects such as corrosives, carcinogens, irritants, mutagens, teratogens, and select agents.
- G. Hazardous Material- any substance in any form (solid, liquid, or gaseous) that is identified as hazardous by federal or state regulations. This would include the following :
 - 1. Corrosive (acids, bases)
 - 2. Paints
 - 3. Petroleum products (gasoline, diesel fuel, oil)
 - 4. Poisons
 - 5. Oxidizers
 - 6. Reactive
 - 7. Solvents (paint thinners, alcohols)
- H. Safety Data Sheets (SDS)- information sheet, provided by the manufacturers of any hazardous material(s) containing fire, health and safety information for that material.
- I. Containment- control of spilled material to prevent spread until proper clean up can be undertaken.
- J. Disposal- the proper disposition of hazardous material after it is used or cleaned up.
- K. Environment- the air, water and land surrounding the campus including all means of access and introduction such as sink and floor drains, sewers, ditches, gutter and storm drains.
- L. Emergency Operation Center (EOC) Director- TTUHSC El Paso president or designee assigned to oversee the planning process necessary to manage a hazardous material event.
- M. Environment Protection Agency (EPA)- the Federal Government Agency empowered to enforce environmental regulations.
- N. Texas Commission on Environmental Quality (TECQ)- the State of Texas regulatory agency empowered to enforce environmental regulations.

II. Responsibilities

- A. TTUHSC El Paso safety manager responsibilities
 - 1. Develop, coordinate, maintain, and implement the TTUHSC El Paso Hazardous Materials Emergency Response Plan.
 - 2. Function as the TTUHSC El Paso emergency response coordinator for all hazardous material incidents involving any facility.
 - 3. Will be part of the TTUHSC El Paso Emergency Management Plan.

4. Serve on the TTUSHC El Paso EOC.
- B. Facilities Operations Management (FOM) Director - Provide support/assistance with any ongoing hazardous materials incident, such as manpower and equipment needed to address and correct the situation.
- C. Texas Tech Police Department - Provide support/assistance with any ongoing hazardous material incident. Notify the safety manager of incidents and ensure the safety of the employees.
- D. TTUHSC El Paso Supervisor's Responsibilities
 1. **Ensure that department has a documented chemical inventory of materials used in the department, (see Attachment A; Inventory Sheet) storage and control of hazardous materials maintained, and that Safety Data Sheets (SDS) are readily available.**
 2. Proper training of employees, students with regards to hazardous materials use, storage, and disposal, and to ensure that their employees and students understand the use of and the information contained in the SDS.
 3. Provide all necessary personal protective equipment (PPE) for employees, students to safely perform their task.

III. Hazardous Material Spill Response

- A. Spills are classified into three basic categories.
 1. Spills/releases that are immediately dangerous to life or health:

In the event of a spill or release of a chemical that in the opinion of the lab/clinic supervisor or person responsible for the chemical or area determines that the event presents an immediate health threat to the individual and/or other occupants in the building. Follow the following steps:

 - a) Activate the fire alarm to evacuate the building.
 - b) Call TT police 215-7111 from a safe location and provide the following information:
 - i. Nature of the emergency.
 - ii. Chemical involved if known.
 - iii. Building and room number.
 - c) Remain near entry point to meet responding personnel and provide information they may need.
 - d) Contact the safety managers at 915-215-4820
 2. Spills/Release that can be cleaned by lab/clinical personnel:

Attempt to clean up a spill/release if you and your supervisor feel that it is safe to do so. The following guidelines should be followed:

- a) You are thoroughly familiar with the hazards of the material and have the SDS available for reference.
- b) You have proper PPE in place, should it be necessary to use.
- c) Have the appropriate absorbent/neutralizers readily available.

It is essential that all spill cleanup waste is collected for proper disposal. Do not place in or around regular trash. Place the spill cleanup waste in a closed container and attach a hazardous waste label. Complete an on-line "Transfer of Chemicals" form for proper disposal.

3. Spills/release that are not immediately dangerous to life or health but require technical assistance:

If you and your supervisor feel that you do not have the proper training or equipment necessary to clean up the spill/release call the Safety Services managers at 915-215-4820. You can also call TT police at 915-215-7111 for assistance.

Personnel can safely cleanup the vast majority of chemical spills that occur. Whoever is most knowledgeable about the spill is responsible for prompt notification and proper clean-up, if safe to do so. It is the responsibility of the department supervisor to have spill clean-up materials and PPE, which are appropriate for the chemicals being handled and readily available for emergency use. They are also responsible for ensuring that spills are cleaned up as soon as possible.

The various types and quantities of hazardous chemicals used at TTUHSC El Paso require preplanning in order for accidental chemical spills to be handled in a safe manner.

B. Minor Spill

1. Evaluate the spill situation before making any decisions.
 - a) What chemicals are involved?
 - b) Where is the SDS for this chemical and what does it say about spill clean-up?
 - c) Is the appropriate spill kit available?
 - d) Do you need to isolate the spill area; barrier or safety watch?
 - e) If the chemical is flammable, do you need to turn off any equipment, heat sources, electrical panels, or other potential ignition sources?
 - f) Will you need to notify your supervisor about the spill?
 - g) Is PPE needed and is it available?
 - h) Will you need to have another person stand by or assist during the clean-up?
 - i) Does the ventilation to the area need to be improved?

j) Will the spill have other consequences in other areas and to other people?

2. Safe clean-up of a spilled chemical may include following several of these guidelines;

- a) Notify others in the immediate area that a spill has occurred.
- b) Advise other departments of the spill, as needed.
- c) Isolate the area -- so that no one unknowingly walks into the contaminated area -- by closing doors, posting other individuals at doors or hallways to warn others, barriers tape, etc..
- d) Increase area ventilation, if needed, by turning on hoods/fans.
- e) Review the spill clean-up procedures recommended on the SDS sheet.
- f) Procure and open the chemical spill kit, and evaluate the contents.
- g) Plan the clean-up procedures you will follow.
- h) Avoid breathing vapors/fumes from the spill.
- i) Confine spill with absorbent pads and paper towels.
- j) Acid and base spills should be neutralized prior to clean-up.
- k) Collect residue and contaminated PPE, place in disposal container, and label waste container.
- l) Decontaminate reusable cleanup supplies such as scoops and rubber boots.
- m) Restock the chemical spill kit and return it to the normal storage location.
- a. In the event of personal contamination, remove affected clothing and flush contaminated skin with water for 15 minutes, and seek medical attention at UMC Occupational Health Clinic or Emergency Room as severity indicates.

C. Major Spill

If an area contains large quantities of any chemical, emergency procedures for spill clean-up must be included as part the Standard Operating Procedures (SOP's). Employees should only attempt to clean up large or major spills only if they feel confident that they can manage the spill safely. Otherwise, in case of a major spill for which personnel are not properly prepared, and particularly if any person has been significantly exposed, contaminated or injured to such an extent that medical or other outside assistance is needed, follow the Evacuate, Alert, Remain (**E.A.R.**) steps;

- Evacuate affected area and close doors.
- Alert campus police by calling 915-215-7111 from a campus phone and a safe location.

- Remain close to the phone, if requested to do so, until contacted by emergency responders. Be prepared to provide more information about the spill, including SDS information.

IV. Pre-Emergency Planning and Coordination with Outside Parties

- A. Arrangements have been made to coordinate TTUHSC El Paso Emergency Response Plan for Hazardous Materials and applicable emergency services with TT Police, El Paso Police Department, and the Fire Department's HAZMAT Team.
- B. Community contacts include:

El Paso Fire Department HAZMAT Team911
- C. Meetings will be held when necessary with personnel from these authorities. TTUHSC El Paso safety managers will be responsible for scheduling these meetings.
- D. Copies of TTUHSC El Paso Emergency Response Plan for Hazardous Materials will be maintained at the facility in the Safety Services Office.
- E. The Emergency Response Plan for Hazardous Materials will be reviewed and amended by the safety manager when any of the following situations occur:
 - 1. Applicable regulations are revised or amended.
 - 2. Plan fails during an emergency;
 - 3. List of emergency coordinators changes;
 - 4. List of emergency equipment changes; or
 - 5. Any facility change that would affect the plan.

V. Personnel Roles, Lines of Authority, and Communication

- A. Personnel Roles- The role of the safety manager, TT Police and facilities director are outlined above. All others will be assigned by the EOC director as needed.
- B. Lines of Authority
 - 1. In a situation where hazardous materials have been spilled and it is a life-threatening situation the safety managers and TT Police have the authority to order the evacuation of the building or immediate area.
 - 2. The safety managers will function as the EOC for the emergency spill and will consult TTUHSC El Paso managing director of administrative services or his/her designee if assets and personnel are needed to control the situation. Upon request for outside assistance, the control of incident command will pass to the Fire Department officer responding. TTUHSC El Paso EOC director will ensure continuing support is provided to the incident commander.
- C. Communication- Emergency communication requirements will be satisfied through normal means already in place; office phones, cell phones, email, and TTUHSC El Paso emergency two-way radios.

VI. Emergency Recognition and Prevention

- A. Emergency Recognition- Depending on the circumstance surrounding a hazardous material incident, it may not be readily apparent what type of hazardous material has been released. Policy HSCEP OP 75.03 "Hazardous Material Incidents" will be followed.
- B. Prevention of accidental spills requires careful attention to proper handling procedures by every user. Prevention of chemical spills is the best safety strategy for any work environment. All personnel are expected to be aware of the potential hazards associated with the chemicals with which they are assigned to work. Employees will complete NESOP Level I where the importance of handling hazardous materials and use of Safety Data Sheet (SDS) is emphasized. TTUHSC El Paso expects everyone to learn to utilize safe chemical handling procedures in the workplace, including but not limited to the following concepts and principles:
- Complete online laboratory safety training prior to conducting any laboratory work.
 - Read the safety data sheets for each chemical with which you may work.
 - Learn the properties of the chemical with which you may work.
 - Maintain a neat and organized work area, and eliminate clutter.
 - Make sure all chemical containers are labeled in accordance with OSHA and State of Texas Hazard Communication Act.
 - Label secondary containers with name of the chemical and the hazard warning.
 - Keep chemical containers sealed or closed, except when removing or adding contents.
 - Study the procedures developed for safe use of the chemicals in your work area.
 - Know the difference in hazard between concentrated versus diluted corrosive solutions.
 - Properly store corrosives and flammable chemicals in the appropriate, fire-rated, labeled cabinets.
 - Dispose of waste and excess chemicals appropriately.
 - Learn about the "worst case scenario" for a spill of the chemicals you use, and plan accordingly.
 - Learn the appropriate clean-up procedures for the materials you use.
 - Know how to turn off items such as equipment, heat sources, and electrical panels in an emergency.
 - Use safe handling procedures and be aware of all the potential hazards of the chemicals.

VII. Safe Distance and Places of Refuge

A. Safe Distance

Safe distance for isolating or evacuating unprotected personnel from an area involving a hazardous material will vary depending on whether or not the material is on fire, has vapors which behave like poison gas, or, is in such a liquid quantity that the immediate area is in danger of being contaminated by runoff which would prevent delayed evacuation. The minimum isolation distance is 50 feet and the minimum evacuation distance is 150 feet. The maximum downwind evacuation distance will be evaluated and readjusted as necessary as soon as more definitive information about the material is available.

B. Places of Refuge

Continuous reassessment of conditions at the scene will be necessary in order to respond to change of wind direction, discovery of unexpected sources, or other conditions which may have an impact on the initial isolation and evacuation parameters.

Therefore, sheltering-in-place may provide a better alternative if the involved area can be closed off and the ventilation system shut down. If sheltering-in-place is chosen, it is important that communication be maintained with persons in the building so that they may be advised about changing conditions and if evacuation of the building becomes necessary.

VIII. Site Security Control

Site security and control is the responsibility of TTUHSC El Paso Police. The police lieutenant will have a direct line of communication with the TTUHSC El Paso EOC; once the Fire Department arrives TTUHSC El Paso Police will communicate directly with the incident commander. If an incident occurs at a time when an officer is on campus, that person shall be delegated the initial task of managing site security.

IX. Evacuation Routes and Procedures

TTUHSC El Paso employees will follow fire evacuation routes and direct themselves to their assembly areas. TTUHSC El Paso employees will assist any on-site visitors to evacuate the building to the assembly areas. If sheltering-in-place is required, TTUHSC El Paso employees will follow established procedures. If evacuation of private residences is deemed necessary, TTUHSC El Paso Police will convey this information to the incident commander who will take the necessary actions to order the evacuation. Under no circumstance will any TTUHSC El Paso employee or visitor be permitted to re-enter any area which has been ordered evacuated until clearance to do so is granted by TTUHSC El Paso EOC and the incident commander.

X. Decontamination Procedures

The type of decontamination required and the responsibility for carrying out decontamination will depend on the amount and type of chemical or material involved. Small scale decontamination will be in accordance with El Paso Fire Department protocols.

XI. Emergency Medical Treatment and First Aid

- A. Emergency medical treatment and first aid will be provided by the El Paso Fire Department and Emergency Medical Technicians (EMT) as the emergency medical service agency with responsibility for this area. The average response time is 3-5 minutes. TTUHSC El Paso Police will be notified first, prior to calling 911. Every telephone has the capability of dialing 911 to report an emergency or to call for medical assistance. TTUHSC El Paso Police will direct placement of the ambulance to ensure the unit does not come in contact with contaminants either in the form of product or through the loading of a contaminated patient.
- B. **It is the responsibility of each department manager/researchers and supervisor** to maintain an updated chemical inventory list and Safety Data Sheets (SDS) in their Department / Lab areas and provide copies of these SDS's to the Safety Manager for all chemicals used. SDS can be obtained through the online SDS resource.
- C. It is the responsibility of the safety manager to provide a copy of the appropriate SDS sheet to the Fire Department and on-scene medical personnel prior to the initiation of any treatment / intervention.

XII. Emergency Alert and Response Procedures

- A. Emergency Alert

Alerting of personnel inside our buildings will be handled through the central fire alarm system. Each supervisor, unit safety officer or those assigned will ensure that all employees and visitors exit the building when the fire alarm sounds. Safety team members will ensure that everyone goes to their designated assembly area.

Alerting external agencies, if deemed necessary, will be the responsibility of the TTUHSC El Paso Police and the EOC director or his designee. Class III and IV releases require the notification of Texas Commission on Environmental Quality (TCEQ) and Safety Services. All outside spills, or spills that go outside the building or spills that go into a drain (no matter how small) must be called in to TTUHSC El Paso Safety Services, who will be responsible to report to the appropriate state or federal agencies. The following information needs to be provided; Name and telephone number of the person making the report.

- Name and address of the facility where the spill occurred.
- Time and type of incident (e.g. chemical spill, fire, etc).
- Name and quantity of material(s) involved, to the extent known.
- Extent of injuries, if any.
- Possible hazards to human health or the environment.

B. Response Procedures

TTUHSC El Paso Police and the safety managers will respond to any hazardous chemical or hazardous material incident, of any nature, that occurs in our campus or sites.

XIII. Critique of Response and Follow up

- A. Critique of Response- The TTUHSC El Paso safety manager responding will keep detailed records and logs of any type of incident in order to ensure that all required measures are put in place during and after the incident; in addition to providing data for any required after incident reports. All records and logs will be kept in an electronic form for a period of 5 years.
- B. Follow up- An after incident follow-up will be in accordance with federal, state, and local regulations governing the type of incident, the material or chemical involved, the extent of damage to the environment, and the consequences to the health of humans.

XIV. Personal Protective Equipment and Emergency Equipment

- A. Personal Protective Equipment- The selection and use of personal protective equipment (PPE) will be in accordance with the chemical specific recommendations established by NIOSH / EPA / NFPA, as appropriate. Normally, this information is provided in the SDS.
- B. Emergency Equipment- A limited amount of emergency equipment is available in the Safety Office. It is recommended that each department/laboratory that works with hazardous chemicals have available a spill respond kit appropriate for the chemicals they deal with, within their department.

XV. Training

All TTUHSC El Paso staff will be informed of the "Texas Hazard Communication Plan" / "Right to Understand Law" at time of hire through the New Employee Safety Orientation Program (NESOP) and annually thereafter through the refresher safety program.

The TTUHSC El Paso safety managers should maintain updated knowledge as specified in 29 CFR 1910.120 for the handling of hazardous materials. Safety managers will attend a 40-hour Hazwoper training class and maintain thereafter its certification by attending a yearly 8-hour refresher training.

TTUHSC El Paso Department Chemical Inventory
(Attachment A)

Item #	Product Name	Substance Name	Concentration	CAS #	Quantity	Unit	Hazard Class	Location	Date Received	Date Expired	Supplier
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											



TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER EL PASO

Operating Policy and Procedure

Texas Tech University Health Science Center El Paso Creating a Complete Chemical Inventory – Attachment A

All TTUHSC El Paso departments that store chemicals are required to establish a complete chemical inventory list. A complete chemical inventory includes the following information; identity of the chemical, quantity stored, hazards associated with the substance, and additional information that facilitates effective tracking of chemicals for ordering and/or disposal. Use the chemical inventory template provided and refer to the following guidelines to establish a complete chemical inventory of your department.

1. Columns in green indicate minimum required information. What to include in the chemical inventory:

General Chemicals	Pre-mixed reagents or solutions
Chemicals in elemental form	Gases in cylinders
Liquid nitrogen and other cryogenic substances	Gases anesthetics
Household products that are corrosive, flammable, toxic, or reactive	

2. **DO NOT** include DEA controlled drugs, these drugs should have a separate inventory that is kept in a locked cabinet or safe. For other non-controlled drugs, biologically-derived and related materials, and non-chemical supplies, a separate inventory can be established for these items (medication inventory).
3. **Column B and C.** The product name refers to the name that the manufacturer assigns to the product and may be different from the name of the chemical substance contained in the product. For example, bleach is the name that the Clorox Company assigns to their product that is made of 6.15% sodium hypochlorite (substance name). The substance name for a pre-mixed reagent is the hazardous chemical(s) component of the reagent.
4. **Column H.** Hazard class refers to the physical and health hazards associated with a chemical substance. Consult the Safety Data Sheet (SDS) of the chemical to identify its hazard class. A chemical substance can have one or more hazards associated with it. The hazards classes are:

Compressed, pressurized	Corrosive
Cryogenic	Flammable
Peroxide former	Reactive to air or pyrophoric
Reactive to water	Strong oxidizer
Toxic	Carcinogen
Potentially explosive	Mutagen
Radioactive	Reproductive toxin

5. **Column I.** Location must be reasonably specific so that chemicals can be easily found.
6. **Additional Columns.** Columns may be added to this template if your department needs additional information that is useful to your purpose.
7. Departments need to maintain their chemical inventory list updated. **Every year, in the month of January, a revised inventory list needs to be submitted to the Department of Safety Services.**
8. Please save your inventory electronically and send a copy to jose.melchor@TTUHSC.edu .